

# ABSTRACT OF THE DISCLOSURE

In an adaptive equalizing apparatus for MIMO (Multi-Input Multi-Output) turbo reception, an interference component in a received signal is subtracted therefrom using a replica of an interference component in an interference canceling part 31<sub>n</sub>, the subtracted output is filtered by a filter 32<sub>n</sub>,  
 5 to cancel the remaining interference component and to perform multi-path combining, and in a degree-of-interference-cancellation estimation part 41<sub>n</sub> the degree of interference cancellation  $\beta(i)$  is set such that it is 0 for the iteration number  $i=1$ ,  $0.8+0.05(i-1)$  for  $5 \geq i \geq 2$  and 1 for  $i \geq 6$ , and at the  
 10 beginning of each iteration filter coefficients are calculated using  $\beta(i)$  and a channel estimation value in a filter coefficient calculating part 33<sub>n</sub> and the filter coefficient thus calculated are set in the filter 32<sub>n</sub>. An average value of soft decision symbol estimation values used in the interference canceling part may be used as  $\beta$ .